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The development of polymer laser-active media with improved performances

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Abstract

© Published under licence by IOP Publishing Ltd. The influence of modification of organic glass by additives new derivatives of thiazole and thiourea on the spectral-fluorescent and lasing characteristics of the Rhodamine 6G laser dye has been investigated. For the sample modified by additive - N-(4-carbomethoxy- 5-phenyl-thiazol-2-yl)-N'-phenylthiourea taken in amounts of 0.01 mol% the maximum rise of the absorption and fluorescence intensity to compare with the unmodified sample 1.3 and 2.3 times, respectively, was detected. The 8.3 times more lasing energy, and the 7.3 times higher laser photostability has been achieved.

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